

Application No. 10/803,138  
Amendment dated November 1, 2005  
Reply to Office Action of August 1, 2005

### **REMARKS**

This Amendment responds to the Office Action mailed August 1, 2005. Claims 1-7 remain pending in the application and stand rejected. Claims 1 and 3-5 have been amended herein, and new claims 8 and 9 have been added. Applicants assert that the pending claims are in complete condition for allowance and respectfully request reconsideration in view of the following remarks.

### **Objections to the Specification**

The Specification was objected to for informalities relating to the language of the Abstract. The Abstract paragraph has now been amended, as suggested by the Examiner, and Applicants respectfully request that the objection to the Abstract be withdrawn.

### **Claims Rejected Under 35 U.S.C. §112**

Claim 5 was rejected under 35 U.S.C. §112, second paragraph, for informalities related to the claim language. Claim 5 has now been amended to correct these informalities, as suggested by the Examiner, and Applicants therefore respectfully request that the rejection of claim 5 under 35 U.S.C. §112 be withdrawn.

### **Claims Rejected Under 35 U.S.C. §101**

Claims 3 and 4 stand rejected under 35 U.S.C. §101. Claim 3 has been amended to clarify that "mucous membrane" is not a positively recited element of the claim. Applicants assert that this amendment overcomes the rejection of claim 2 under 35 U.S.C. §101. Claim 4 depends from claim 3, and the rejection of claim 4 should

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therefore be overcome by the amendment to claim 3 stated above. Accordingly, Applicants respectfully request that the rejections of claim 3 and 4 under 35 U.S.C. §101 be withdrawn.

**Claims Rejected Under 35 U.S.C. §102**

Claims 1-3 and 6-7 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. D496,995 to Dorfman. Claim 1 is the only independent claim of this rejected group, and has been amended herein to clarify the claim language. As amended, claim 1 is directed to a cheek and lip retractor for dentistry, comprising:

respective cheek portions and lip portions for the upper and lower lip, each of said lip portions comprising a lip shield and a pair of mucosa pads which are separate and spaced apart from said lip shield, each said lip shield defining a first surface for contacting the lip of a patient, each said mucosa pad defining a second surface facing opposite said first surface for contacting a mucous membrane of the patient, whereby the lip of the patient will be lifted and spaced from the teeth and gingival tissue when installed in the patient's mouth, each of said cheek portions being connected to each of said lip portions by a flexible connecting element between said lip shield and one of said pair of mucosa pads.

Support for this amendment to claim 1 can be found in the Application at page 3, lines 20-30 and with reference to the figures. Applicants assert that the amendments to claim 1 overcome the rejection over Dorfman '995. Specifically, Dorfman '995 does not teach or suggest a cheek and lip retractor comprising a lip shield and a pair of mucosa pads with "each said lip shield defining a first surface for contacting the lip of a patient, each said mucosa pad defining a second surface facing opposite said first surface for contacting a mucous membrane of the patient, whereby the lip of the patient will be

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lifted and spaced from the teeth and gingival tissue when installed in the patient's mouth," as recited in amended claim 1. Rather, the lip and tongue retractor of Dorfman '995 includes upper and lower channel-shaped portions for receiving the lips of a patient therein. Use of the retractor of Dorfman '995 in this manner is depicted in FIG. 8 of corresponding U.S. Patent No. 6,923,761 to Dorfman. The structure of the retractor of Dorfman '995, therefore, is not configured such that oppositely facing side surfaces of the lip channels contact the lip and mucous membrane of a patient to thereby lift and space the lip from the teeth and gingival tissue of the patient as recited in claim 1.

Applicants note, in particular, that the arcuate-shaped connecting portions extending between the cheek portions and lip portions prevent the device from being installed within a patient's mouth such that the alleged lip shield and mucosa pad for each lip portion is positioned between the lip and mucosa (i.e., gums) of the patient. Applicants further note that the connecting elements of Dorfman '995 are not connected "between said lip shield and one of said pair of mucosa pads," as recited in claim 1 (emphasis added). Rather, the connecting elements of Dorfman '995 connect directly the alleged lip shield. For at least these reasons, Applicants respectfully request that the rejection of claim 1 over Dorfman '995 be withdrawn.

Claims 2, 3, 6 and 7 each depend from independent claim 1 and are therefore in condition for allowance for at least the reasons stated above for claim 1. Accordingly, Applicants respectfully request that the rejections of claims 2, 3, 6 and 7 over Dorfman '995 be withdrawn.

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Claims 1-3 and 6-7 stand rejected under 35 U.S.C. §102(b) as being anticipated over U.S. Patent No. 6,203,4714 to Akihiro. Claim 1 is the only independent claim of this rejected group, and has been amended as discussed above. Applicants assert that the amendment to claim 1 overcomes the rejection based on Akihiro '471. Specifically, Akihiro '471 fails to teach or suggest a cheek and lip retractor including a pair of mucosa pads which are separate and spaced apart from said lip shield," as recited in claim 1. Even if the insertion section 2b of the upper lip rest section 2 of Akihiro '471 could be interpreted as a mucosa pad, Akihiro '471 clearly depicts only a single insertion section, and not "a pair of mucosa pads," as recited in claim 1.

Moreover, Applicants assert that the device of Akihiro '471 is configured to receive the lips of a patient within the channel-like upper and lower lip rest sections 2, 4 in the same manner discussed above with respect to Dorfman '995, as illustrated by FIGS. 4 and 9. The device of Akihiro '471 therefore does not teach or suggest a lip shield defining a first surface for contacting the lip of a patient and a mucosa pad defining a second surface facing opposite the first surface for contacting a mucus membrane of the patient, whereby the lip of the patient will be lifted and spaced from the teeth and gingival tissue. For at least these reasons, Applicants respectfully request that the rejection of claim 1 over Akihiro '471 be withdrawn.

Claims 2, 3, 6 and 7 each depend from independent claim 1 and are therefore in condition for allowance for at least the reasons stated above for independent claim 1. Accordingly, Applicants respectfully request that the rejections of claims 2, 3, 6 and 7 over Akihiro '471 be withdrawn.

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**Claims Rejected Under 35 U.S.C. §103**

Claim 4 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Dorfman '995 or Akihiro '471. Claim 5 stands rejected under 35 U.S.C. §103(a) as being unpatentable over either Dorfman '995 or Akihiro '471 in further view of U.S. Patent No. 5,199,872 to Leal.

Claims 4 and 5 each depend from independent claim 1, and therefore include each feature recited in claim 1, as amended. Claim 4 has been amended to more clearly recite the claimed distance between the mucosa pads and lip shield as being "in the range of 10mm to approximately 30mm." Applicants assert that the amendment to claim 1 overcomes the rejections of claims 4 and 5 over Dorfman '995, Akihiro '471 and Leal '872 for at least the reasons stated above for claim 1. Specifically, neither Dorfman '995 nor Akihiro '471 teaches or suggests a cheek and lip retractor wherein the lip portions comprise a pair of mucosa pads which are separate and spaced apart from a lip shield, and wherein the lip shield defines a first surface for contacting the lip of a patient and the mucosa pad defines a second surface facing opposite the first surface for contacting a mucous membrane of the patient, as discussed above.

Leal '872 is directed to a dental appliance having a wire frame structure upon which cotton or other padding material is wrapped around the wires to engage the soft tissue of a patient's mouth. Leal '872 therefore does not teach or suggest a modification of Dorfman '995 or Akihiro '471 to have a pair of mucosa pads separate and spaced apart from a lip shield, as recited in claim 1. Moreover, Applicants note that the Examiner has not cited any reference to support the assertion in the Office Action that

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the thickness of a person's lips is in the range of 10mm to 30mm. For at least this additional reason, Applicants further traverse the rejection of claim 4 over Dorfman '995 and Akihiro '471. For at least the reasons set forth above, Applicants respectfully request that the rejections of claims 4 and 5 under 35 U.S.C. §103 be withdrawn.

### **New Claims**

New claims 8 and 9 have been added by this amendment. Claim 8 is directed to a cheek and lip retractor comprising:

first and second cheek engaging portions; and

upper and lower lip portions;

each of said upper and lower lip portions comprising:

a lip shield, and

first and second mucosa pads,

each of said mucosa pads spaced from said lip shield a distance sufficient to space the lips of a person wearing the retractor from a mucous membrane so as to facilitate unobstructed access to the person's gingival tissue.

Claim 9 depends from claim 8 and further recites that "each said cheek portion is connected to said upper and lower lip portions by respective flexible connecting elements extending from said cheek portion to a position between said respective lip shield and said mucosa pads." Support for claims 8 and 9 can be found in the Application at page 3, lines 20-30 and with reference to the figures. Accordingly, Applicants assert that no new matter has been added by new claims 8 and 9.

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Applicants further assert that new claims 8 and 9 are not taught or suggested by the references of record. Specifically, neither Dorfman '995, Akihiro '471 nor Leal '872 teaches or suggests a cheek and lip retractor comprising upper and lower lip portions having a lip shield and first and second mucosa pads spaced from the lip shield a distance sufficient to space the lips of a person wearing the retractor from a mucous membrane to facilitate unobstructed access to the person's gingival tissue, as discussed above with respect to claim 1. Accordingly, Applicants respectfully request early and favorable examination of new claims 8 and 9.

### **Conclusion**


In view of the foregoing amendments to the claims and the remarks set forth herein, Applicants respectfully believe this case is in condition for allowance and respectfully request allowance of the pending claims. If the Examiner believes any issue requires further discussion, the Examiner is respectfully asked to telephone the undersigned attorney so that the matter may be promptly resolved. The Examiner's prompt attention to this matter is appreciated.

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Applicants are of the opinion that no additional fee is due as a result of this amendment. If any charges or credits are necessary to complete this communication, please apply them to Deposit Account No. 23-3000.

Respectfully submitted,

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